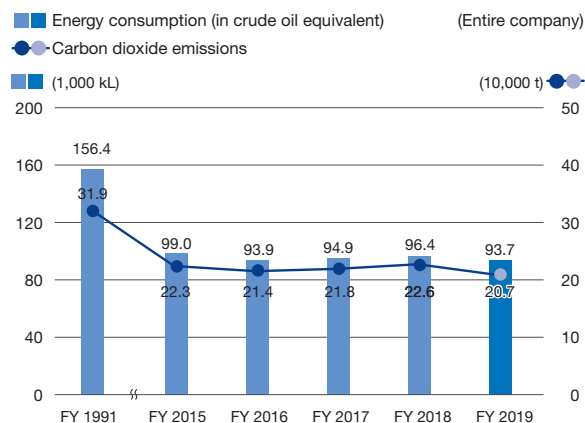


Environmental, Social and Governance (ESG) Data

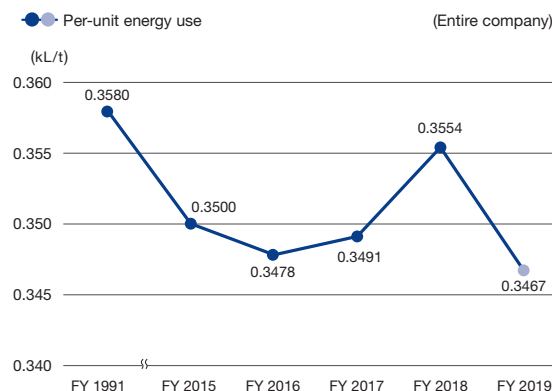
### Environmental data of Nippon Soda

#### Changes in energy consumption and CO<sub>2</sub> emissions

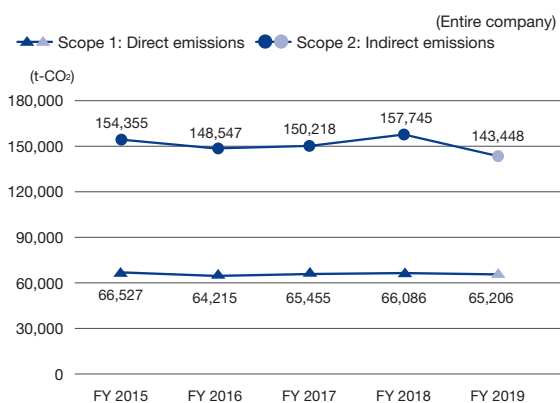


In FY 2010 and later years, the amounts of consumption at the Head Office, branches and other offices were included. The data collection area at Chiba Plant was changed.

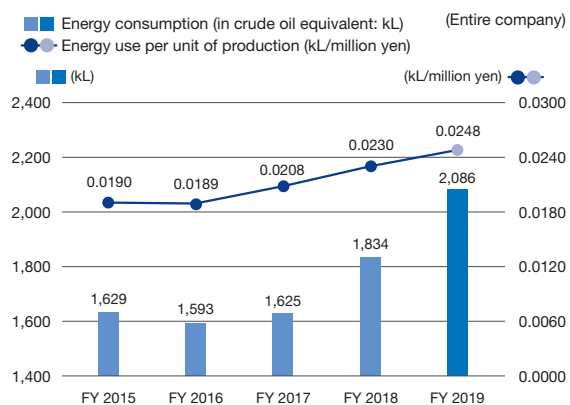
#### The energy use per unit of production



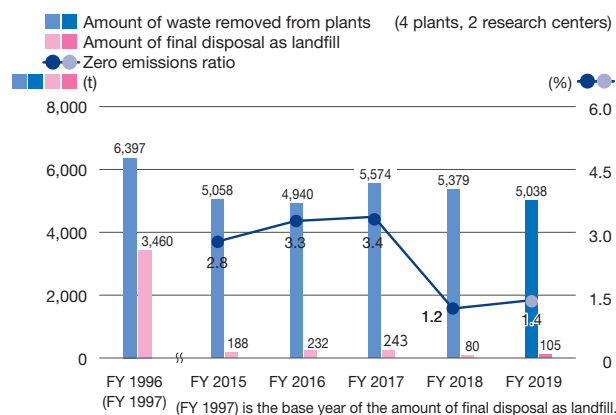
#### Changes in GHG emissions for Scope 1 and Scope 2



#### Changes in energy consumption related to transportation and energy use per unit of production

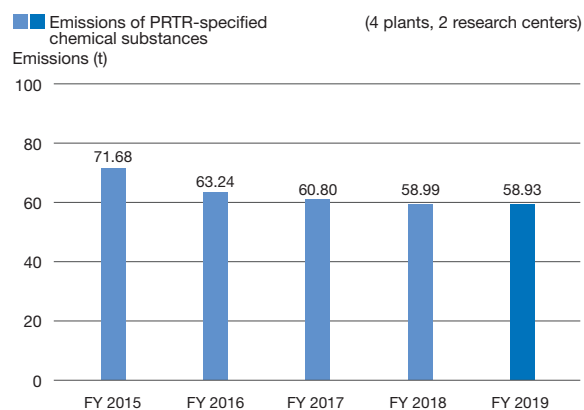


#### Change in the amount of industrial waste emissions

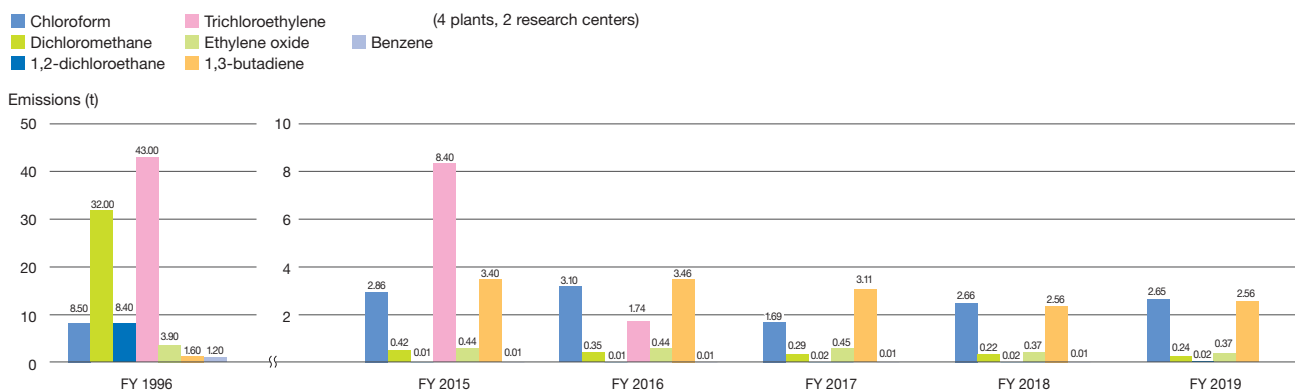


The amount of waste removed from plants does not include the waste sludge of activated sludge process at Takaoka Plant (which is treated with microbial autolysis at an external facility). Base year of the amount of final disposal as landfill: FY 1997

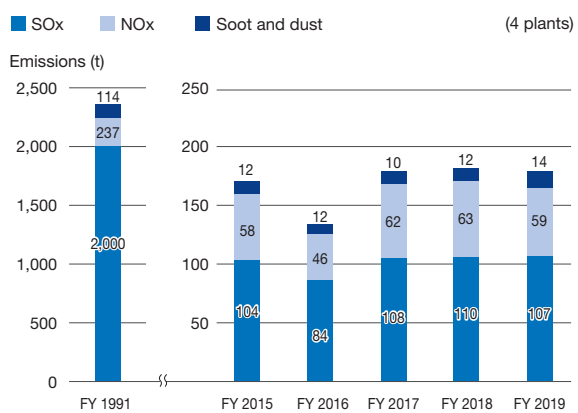
#### Changes in the emissions of Class 1 chemical substances specified by the PRTR Law



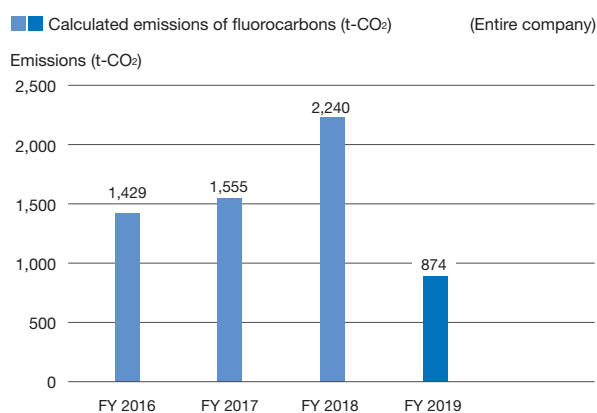
### Changes in the emissions of voluntarily controlled chemical substances to the atmosphere



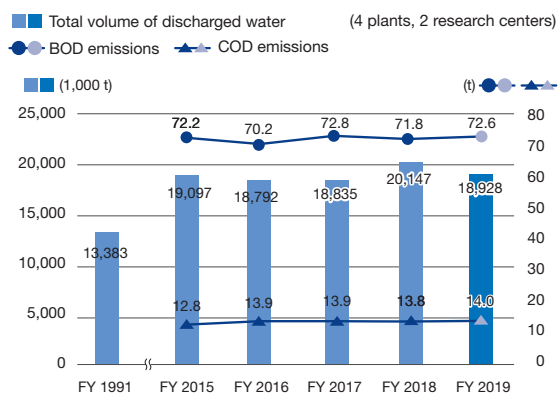
### Changes in the emissions of substances controlled by the Air Pollution Control Act



### Change in the calculated emissions of fluorocarbons

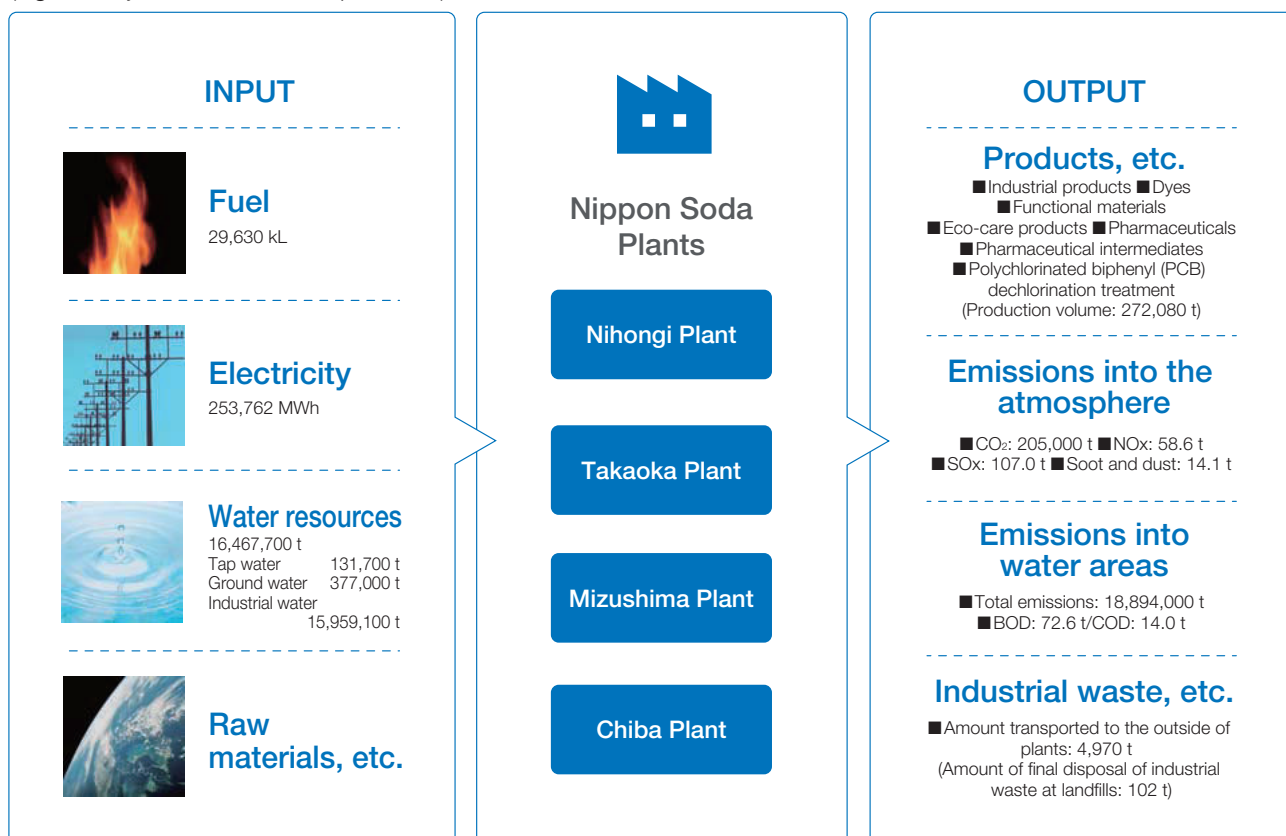


### Changes in the total volume of discharged water and emissions of BOD and COD



### Major environmental impact data

The environment impact of Nippon Soda's four major plants in Japan in FY 2019 are shown in the figure below:  
(Figure: Major environmental impact data)



### Violation of environment-related laws and regulations, etc.

**(Nippon Soda)**  
None

**(Group companies)**

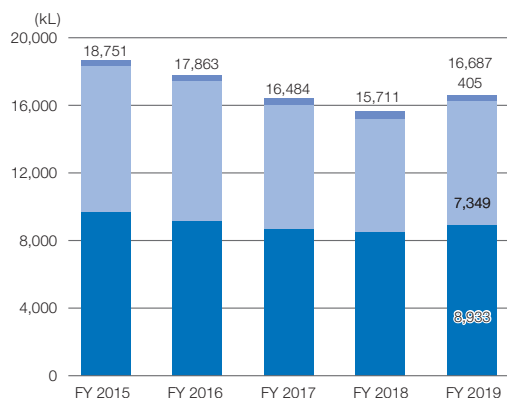
March 22, 2019 at Aizu Plant of Nisso Metallochemical Co., Ltd.: An excess over the standard value of wastewater: It was confirmed that the value of a legally controlled substance contained in discharged water exceeded the standard value due to a failure of the affiliated wastewater receiving company. The violation was reported to the authorities. The plant immediately stopped the discharge of wastewater. The cause was identified and measures to prevent a reoccurrence were taken.

## Environmental data of Group companies

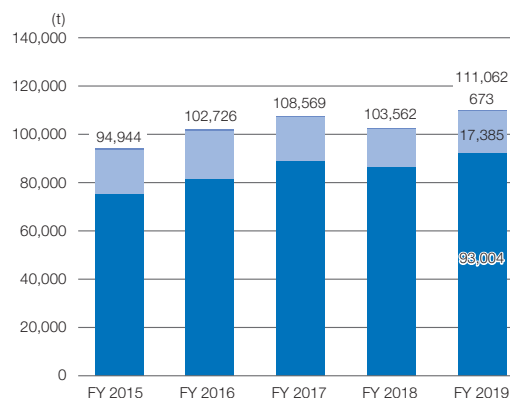
### Manufacturing Group company

■ Nisso Metallochemical Co., Ltd. ■ Nisso Fine Co., Ltd. ■ Shinfuji Kaseiyaku Co., Ltd.

Change in energy consumption (in crude oil equivalent)

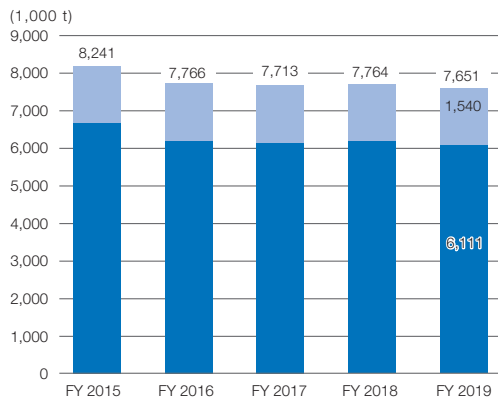


Change in the amount of carbon dioxide emissions

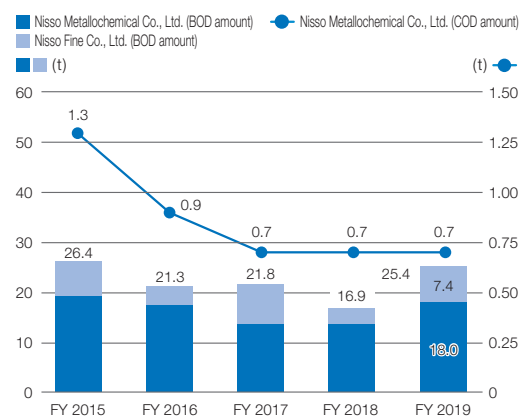


Note: The increase in CO<sub>2</sub> emissions was due to an increase in industrial waste oil received by Aizu Plant of Nisso Metallochemical Co., Ltd. under a contract.

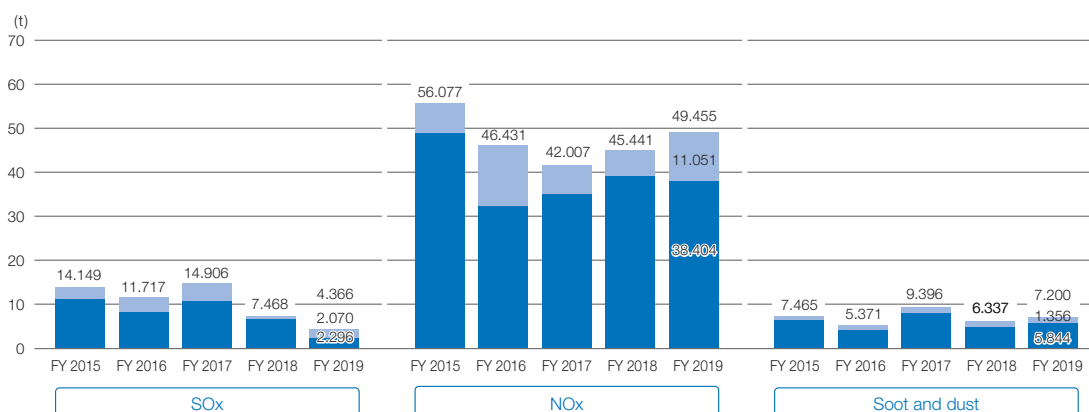
Change in the total volume of discharged water



BOD & COD of wastewater

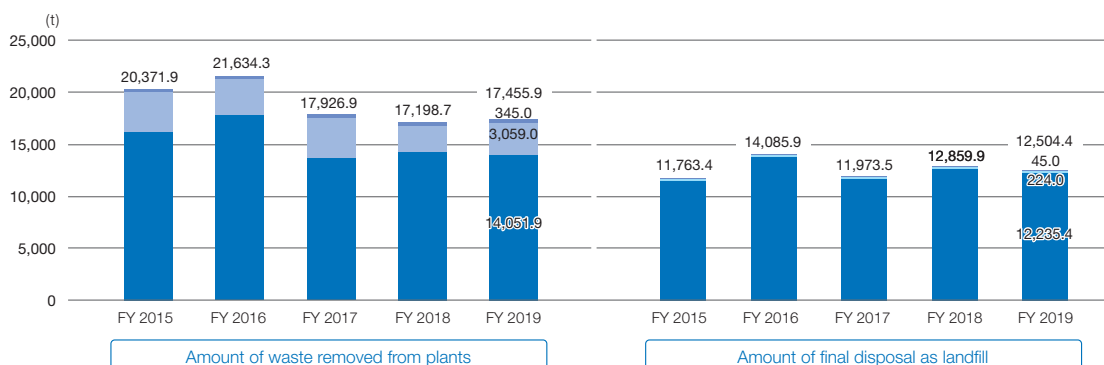


Change in the amount of emissions of substances controlled by the Air Pollution Control Act



■ Nisso Metallochemical Co., Ltd. ■ Nisso Fine Co., Ltd. ■ Shinfuji Kaseiyaku Co., Ltd.

### Change in the amount of industrial waste emissions



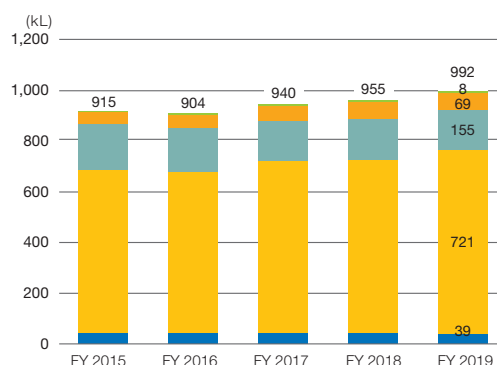
## Overseas manufacturing Group companies

(FY)		2015	2016	2017	2018	2019
Alkaline SAS (MSSA) (France)	Energy consumption (MWh)	251,968	277,814	271,004	289,841	299,119
	Total amount of wastewater (1,000 t)	261.85	253.03	235.79	230.62	239.73
Nisso Namhae Agro Co., Ltd. (Korea)	Energy consumption (in crude oil equivalent) (kL)	1,980.93	2,046.18	2,040.68	1,761.83	1,646.67
	Carbon dioxide emissions (1,000 t)	3.96	4.09	4.07	3.48	3.25
	Total amount of wastewater (1,000 t)	115.89	103.98	98.48	90.78	77.30

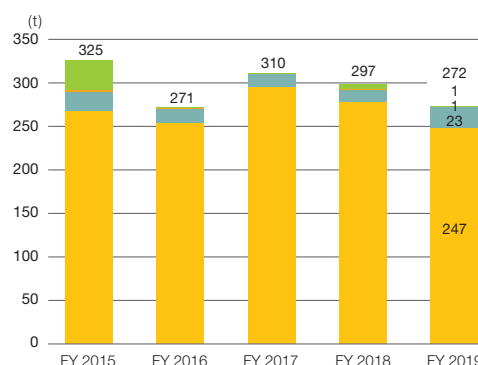
## Non-manufacturing Group companies

■ Nisso Shoji Co., Ltd. ■ Sanwa Soko Co., Ltd. ■ Nisso Engineering Co., Ltd.  
 ■ Nisso Kensetsu Co., Ltd. ■ Nisso Green Co., Ltd.

### Change in energy consumption (in crude oil equivalent)



### Change in the amount of industrial waste emissions

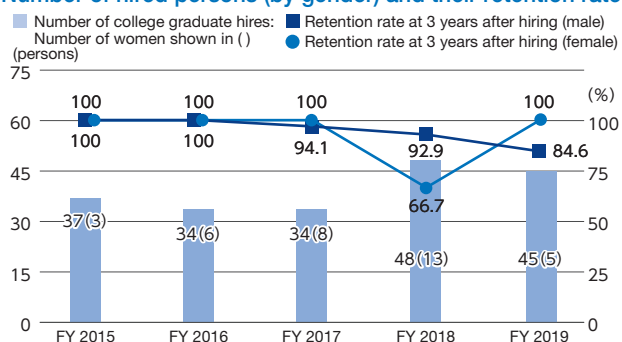


Note: The amount of waste generated at Nisso Shoji Co., Ltd. is not included.  
 The amount generated at Sanwa Soko Co., Ltd. is only included in the tabulation for fiscal 2015.

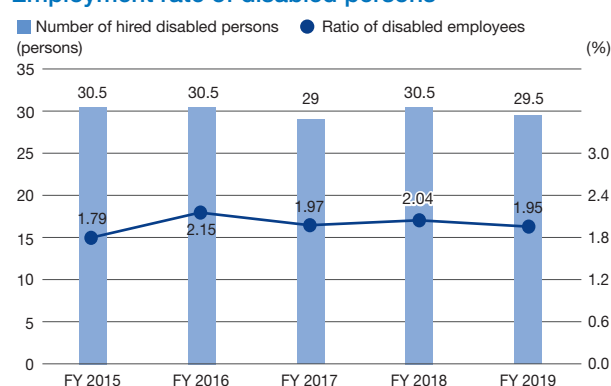
## Environmental, Social and Governance (ESG) Data

## Social data of Nippon Soda

## Number of hired persons (by gender) and their retention rate



## Employment rate of disabled persons



## Change in the number of employees taking child/family care leave

FY	Those who took child care leave (person)		Those who took family care leave (person)	
	Men	Women	Men	Women
2014	1	6	0	0
2015	0	6	0	0
2016	1	2	0	0
2017	2	3	1	0
2018	3	4	0	0
2019	5	10	1	0

## Change in the number of employees taking maternity/child care leave and the rates of those returning to work and those remaining for three years after returning to work (by gender)

FY	Employees who took maternity/child care leave (employee)		Rate of employees returning to work (%)		Rate of employees remaining with the company (%)	
	Men	Women	Men	Women	Men	Women
2014	1 (1,151)	7 (134)	100	100	—	50
2015	0 (1,144)	5 (137)	—	100	—	83.3
2016	1 (1,137)	2 (142)	100	100	100	100
2017	2 (1,138)	3 (152)	100	100	100	100
2018	3 (1,130)	6 (159)	100	75	100	100
2019	5 (1,143)	12 (168)	100	100	100	100

The numbers were counted at the first fiscal year of the leave.  
The numbers in brackets are the total numbers of men and women respectively at the end of each fiscal year.  
Retention rate is for employees who in this fiscal year are in their third year since returning to work.

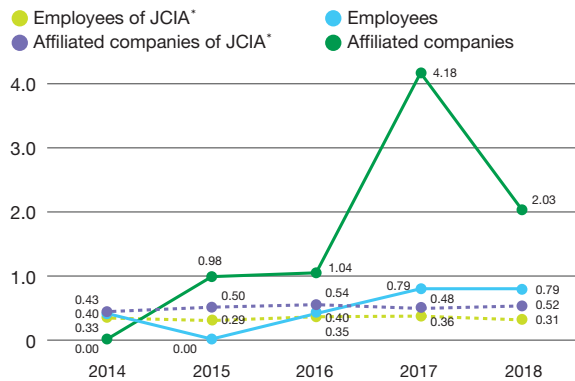
## Total annual working hours per employee

Normal working hours (hours)	Early start and overtime hours (hours)	Holiday overtime hours (hours)	Paid annual leave days taken (days)	Various kinds of leave days taken (days)	Total annual working hours per person (hours)
1,825.0	118.7	7.5	15.3	2.0	1,818.3

## Number of labor union members (Nippon Soda)

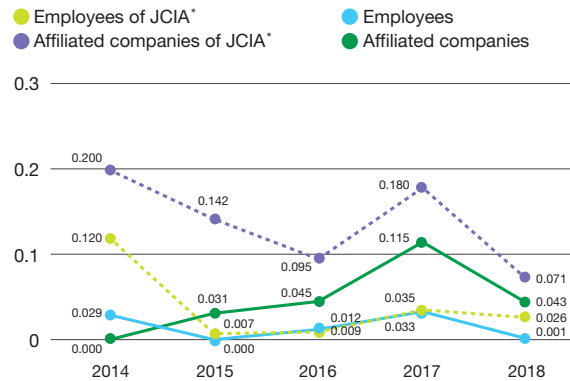
FY	The number of labor union members (person)	Average age (years)	Average length of service (years)	Rate of members (%)
2014	856	40.9	19.9	65.5
2015	845	40.6	19.3	65.0
2016	844	40.4	18.9	64.8
2017	820	39.3	17.6	63.3
2018	824	37.9	15.8	62.7
2019	840	37.7	15.6	63.7

### Change in occupational accident frequency rates



Occupational accident frequency rate: Casualties/Total working hours (per million hours)  
 (\*) JCIA stands for Japan Chemical Industry Association.  
 The data were collected from January 1 to December 31 of each year.

### Change in severity rate for occupational accidents



Severity rate of occupational accidents: Man-days lost/Total working hours (per 1,000 hours)  
 The data were collected from January 1 to December 31 of each year.